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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/459,260	12/10/1999	EDWARD MARGOSCIN	5053-30700	9934

7590 09/16/2003

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EXAMINER

PATEL, JAGDISH

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/459,260

Applicant(s)

MARGOSCIN ET AL.

Examiner

JAGDISH N PATEL

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8, 10, 11 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 7/3/03 has been entered.

Response to Amendment

2. The specification has been amended per request.

Statute Cited in Prior Action

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

4. The applicant's argument that the if Thorne is applied to the invention of McDonough, the list of allowable values and the method of validation would necessary be contained in the user

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interface as well and not in the Middleware is not persuasive in light of the claim as recited.

It is asserted that this argument is not relevant because claim 36 fails to positively recite location of the domain file (which comprises a list of allowable values) much less than that it is contained in the middleware. However, the present analysis is predicated on the assumption that the domain file located or residing in the middleware as suggested by the applicant's arguments.

As to the applicant's argument that "to establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art, the Examiner respectfully points out that applicant has not considered the requirement in its entirety. The requirement clearly states that **"there must be some suggestion or motivation or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine teachings"**. The Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071,

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1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 350, 21 USPQ2d 1941, 1943 (Fed. Cir. 1992).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 36-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 recites limitation "a domain file .." which comprises a list of allowable values associated with business transactions. The further recites that the middleware program determines whether portions of the received data include allowable values based on the domain file. There is no linkage between the middleware program and the domain file, therefore the middleware program cannot receive data from the domain file. This defect renders claim 36 and associated dependent claims (37-50) indefinite and are rejected accordingly.

Claims 51-60 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps,

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such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: one or more steps that relate to the "determining whether a portion of received data includes values in a list of allowable values" step to "flattening data" and "transferring the data" steps. In absence of such step the claim 51 as a whole and associated dependent claims 52-60 are rendered indefinite.

Claims 61-70 also contain similar deficiency. Independent claim 61 recites limitation determining whether a portion of received data includes values in a list of allowable values". However, the outcome of the determination has no relationship to the any limitation(s) that follows. In other words, the determining step does not affect the transforming data step and therefore also the transferring and processing steps. In absence of one or more steps that relate the determining step to the aforementioned other steps the claim 61 as a whole and associated dependent claims 62-70 are rendered indefinite.

Claim Rejections - 35 USC § 103

7. Claims 36-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough et al. (US Pat. 6,115,693) and further in view of Thorne (US Pat. 6,100,891).

8. Examiner's note: the following definition of CORBA architecture is extracted from web site

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<http://www.trinity.edu/~rjensen/245glosf.htm#CORBA> and provided for convenience of the applicant, since many features recited in the claims are facilitated by CORBA which is the platform used in the McDonough reference.

CORBA= Common Object Request Broker Architecture is in competition with Microsoft's OLE/DCOM object-oriented Middleware technology for business applications. CORBA is most popular in communications Middleware using an Object Request Broker ORB. CORBA evolved out of TCP/IP. DCOM is bundled with the Windows 2000 operating system but has lackluster support for other operating systems. CORBA is more flexible with other operating systems. Both CORBA and OLE/DCOM are designed to distribute objects or assembly of applications from discreet, self-contained components. Both are appealing in the fast growing technology of "object middleware." Object middleware has corporate appeal due to the ability to provide highly abstracted object-oriented programming interfaces. Microsoft added new terminology in this area. For example, COM depicts a Component Object Model to describe the base model used for building components. The term DCOM is the Distributed form of COM. ActiveX (formerly OCX) is the packaging technology for controls and supercedes prior Visual Basic Controls known as VBX. OLE no longer means object linking and embedding. OLE now refers to a collection of technologies. For interactive computing on the web, see Distributed Network Computing. A good textbook chapter on CORBA is given at <http://ei.cs.vt.edu/~wwwbtb/fall.96/book/chap20/index.html>. Also see RPC and <http://www.trinity.edu/rjensen/260wp/260wp.htm#ODBC>.

Claim 36: McDonough teaches a system comprising:

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a server configured to process business transactions (servers operated by Content providers, Fig. 4 and L 426, ...434, col. 8 L 61-67);

a middleware program communicatively coupled to the server (context manager 402, Fig. 4 and col. 8 L 51- 60, which provides management of the information);

a channel communicatively coupled to the middleware program and to the server (channel is shown as customer contact access methods and shown in Fig. 4 as kiosk 424, call center 422, phone 420 etc.); and

an interface program communicatively coupled to the channel and to the middleware program, wherein the interface program is configured to receive data and a command that will initiate a business transaction (the context manager also performs functions of the interface program as described in col. 8 L 51-67, management capability for multiple customer access resources which share common business processes);

wherein the interface program receives data from the channel and transmits the data to the middleware program (an inherent feature of a middleware CORBA as discussed in col. 9 L 25-30, also refer to description of the context manager discussed in analysis of above steps).

McDonough, while teaches the system substantially as claimed, fails to explicitly, recite a domain file comprising a list of allowable values associated with one or more business transactions and that the middleware program determines whether portions of the received data include allowable values based on the domain file validates portions of the data, transforms the data into a form required by the server, and transmits the transformed data to the server. It is noted such functionality,

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is inherent and essential to successfully deploy the communication applications of McDonough in the CORBA architecture ((an inherent feature of a middleware CORBA as discussed in col. 9 L 25-30, also refer to description of the context manager discussed in analysis of above steps)).

Thorne, in the same field of endeavor, however, teaches a system for application of data communication and data conversion and validation which comprises a domain file comprising a list of allowable values associated with a business transaction (col. 6 L 17-30)and further suggests determining whether the portion of the data include allowable values based on a domain files (list of allowable values .. or establishing a database).

Thorne discloses the claimed feature of allowable values associated with business transaction as being contained in the user interface. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the aforementioned feature in the middleware (the context manager)of McDonough, since it has been held that rearranging parts of an inventions involves only routine skill in the art. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the domain file comprising a list of allowable values into the context manager and determining allowability of the data based on the domain file (validation of input data) as suggested by Thorne to McDonough because validation of input data would provide conformity to the format requirements and limits imposed by the server to facilitate further processing of the data by the server.

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It would have been obvious to one of ordinary skill in the art at the time of invention to implement the domain file comprising a list of allowable values and determining allowability of the data based on the domain file (validation of input data) as suggested by Thorne to McDonough because validation of input data would provide conformity to the format requirements and limits imposed by the server to facilitate further processing of the data by the server.

Claims 37. wherein the middleware program receives a result from the business transaction server and transfers the result to the interface program (Fig. 4 context manager, 402).

Claim 38-41. wherein the channel comprises a kiosk (a computer terminal, a call center, a an electronic data transfer system (refer to customer access methods shown in Fig. 1 and Fig. 4 heterogeneous systems 406)).

Claim 42-43 . wherein a local area network (wide area network) communicatively couples the channel to the server (Fig. 4 LAN/WAN).

Claim 44. wherein the portions of the domain file may be changed without changing code of the middleware program (col. 9 L 25-30, a feature of the CORBA used for distributed computing and object messaging).

Claims 45 wherein the middleware program generates an error code if the portions of the received data include values that are not allowable values (inherent feature of context manager because as described in col. 9 L 52-62 as the Quality Center which performs reporting 508, messaging and trouble shooting 512).

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Claim 46 wherein the domain file comprises at least one serialized file generated by the domain manager (inherent feature of the CORBA used for distributed computing and object messaging)

Claim 47. wherein the middleware program transfers data to a plurality of business transaction servers during the processing of a business transaction (refer to Fig. 4, context Manager 402, transfers data to a plurality of transaction servers 404).

Claim 48. wherein the middleware program comprises computer code written in an object-oriented programming language (col. 9 L 25-30, CORBA, features of openness and functionality).

Claim 49. wherein the middleware program is extendable without altering source code of the middleware program ((col. 9 L 25-30, CORBA, inherent to the architecture) .

Claims 50. wherein an extension to the middleware program comprises computer code that is stored in a package and run when the middleware program runs((col. 9 L 25-30, CORBA, inherent to the architecture) .

Claims 51-60. All limitations of claims 51-60 have been analyzed as in claims 36-50. Note that flattening data is inherent part of formatting and data communication among different devices.

Claims 61-70. All limitations of claims 61-70 have been analyzed as in claims 36-50.

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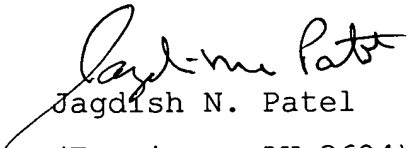
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jagdish Patel whose telephone number is (703) 308-7837. The examiner can normally be reached Monday-Thursday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin, can be reached at (703) 308-1038. The fax number for Formal or Official faxes to Technology Center 3600 is (703) 305-7687. **Draft faxes may be submitted directly to the examiner at (703) 746-5563.**

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113 or 308-1114. Address for hand delivery is 2451 Crystal Drive, Crystal Park 5, 7th Floor, Alexandria VA 22202.



Jagdish N. Patel

(Examiner, AU 3624)

9/12/03